From: Jay Field

Eric Blischke/R10/USEPA/US@EPA To:

Burt Shephard/R10/USEPA/US@EPA; Chip Humphrey/R10/USEPA/US@EPA; Joe Goulet/R10/USEPA/US@EPA; Cc:

rgensemer@parametrix.com; Robert Neely

Subject: Re: Bioassay Interpretation at Portland Harbor

06/08/2009 12:25 PM Date: Attachments: PH ToxRef 090608.xls

Eric, attached is a file including control-adjusted values, significance, and tox level classification for the samples. As I mentioned previously, I did not take statistical significance into account. one sample with maximum tox level classification of 2 is affected (ie, samples that classify as level 2 for the endpoint but are not statistically significant and no other endpoint would classify >= 2). there are a number of such samples for tox level = 1. If those samples are an issue, we should ask LWG for a determination of statistical power (for Round 2, LWG classified samples as not significant, significant, or indeterminate).

Blischke.Eric@epamail.epa.gov wrote:
> I agree. The message I left with John this morning was to figure out
> what information we should exchange (us to them, them to us) to
> facilitate this discussion. Can you could start to pull together a
> similar package for the LWG?

Thanks, Eric

Jav Field <Jay.Field@noaa.

gov>

06/08/2009 11:03 AM

Eric Blischke/R10/USEPA/US@EPA Burt Shephard/R10/USEPA/US@EPA, rgensemer@parametrix.com, Joe Goulet/R10/USEPA/US@EPA, Chip

Humphrey/R10/USEPA/US@EPA

Re: Bioassay Interpretation at Portland Harbor

Eric, before we talk with John, I think we should request a table from LWG with raw values, control-adjusted values, significance, and tox level classification. Without knowing what the discrepancies are, I'm not sure what we would accomplish by having a discussion. Also, I would like some more clarification on item #3, calculation of hit level. We used the reference envelope value (REV) and 90%, 80%, and 70% of that value to determine the thresholds. (all values are control-adjusted values). this is the same as subtracting 10% of the REV from the REV, but avoids potential compounding rounding errors. > but avoids potential compounding rounding

> I'm available most of this week except Thursday.

Blischke.Eric@epamail.epa.gov wrote:

At the AOPC meeting, it became apparent that our interpretation of the sediment bioassay results did not match the LWG's interpretation. I am interested in understanding the basis for this discrepancy. Based on my review of the data, the bioassay results match up with the bins that we established in Table RE-2 in our March 31, 2009 direction to LWG (see previous email). Last week, I put in a call to John Toll to try to understand the LWG's interpretation. Although I did not speak directly with John, he left me a voice mail that described 3 possibilities for the discrepancy: discrepancy:

- The raw response rates differ slightly e.g., 15% vs. 17%.
- John does not know why this is the case.

 2) Significance Testing. The LWG used the biostats software. He indicated that this is a complicated procedure but that the LWG followed the decision tree associated with the software package and did not make any choices that were inconsistent with the decision tree.
- 3) The calculation of the level of the hit (e.g., low, moderate or severe toxicity) based on a comparison to the reference envelope was based on an added 10% to the reference envelop opposed to multiplying by the reference envelope value by 1.1 or

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I would like to set up a time to discuss this sometime this week.

Please let me know when you might be available. I will work with

John to hopefully have some information that we can use to focus

the discussion.

Thanks, Eric,

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